

Top 100
Global
Innovator
for 10 years

Susol UL MCCB

UL Molded Case Circuit Breakers



CBi electric
North America



Super Solution for Protection

The new Susol series with thermal-magnetic circuit breakers are designed to protect low voltage electrical systems from damage caused by overloads and short circuits.

■ FOR POWER DISTRIBUTION

High breaking capacity
Optimum coordination technique
Powerful engineering tools
Reverse feeding

■ FOR PROTECTION OF MOTORS AND THEIR CONTROL DEVICES

Optimal overload protection
Guaranteed Short Circuit Current Ratings

■ FOR CONTROLLING AND DISCONNECTING CIRCUITS

■ FOR EXTENSIVE APPLICATIONS

Wide range of optimized auxiliaries and accessories



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SUSOL MCCBS AT A GLANCE.

1 FOR POWER DISTRIBUTION

- High breaking capacity
- Optimum coordination technique
- Powerful engineering tools
- Reverse feeding

2 FOR PROTECTION OF MOTORS AND THEIR CONTROL DEVICES

- Optimal overload protection
- Guaranteed Short Circuit Current Ratings

3 FOR EXTENSIVE APPLICATIONS

- Wide range of optimized auxiliaries and accessories

4 FOR CONTROLLING AND DISCONNECTING CIRCUITS



UTE100

UTS150

UTS250

UTS400

SIMPLIFIED PRODUCT RANGE

- **AF:** 100AF, 150AF, 250AF, 400AF, 600AF, 800AF, 1200AF
- **Ampere Range:** 15A ~ 1200A
- **Pole:** 2P, 3P

VARIABLE ACCESSORIES

- Electrical auxiliaries[AX, AL, UVT, SHT]
- Extended and direct mount rotary handle
- Flange handle with flexible cable and linkage
- Variable depth mechanism
- Locking devices
- LUG for CU/AL cable with UL486

HIGH PERFORMANCE

- Ultimate breaking capacity (kA rms)
- Max 100kA @480VAC and 50kA @600V

STANDARDS

- **World class with UL489**
 - UL489
 - CSA
- **IEC60947-2**
- **Class 1E for Nuclear power plant**
 - EQ : Environment Qualification
 - SQ : Seismic Qualification

VARIOUS TRIP UNITS

- **ATU:** Adjustable thermal & magnetic unit
- **FMU:** Adjustable thermal, fixed magnetic unit
- **FTU:** Fixed thermal & magnetic unit
- **ETS:** Electronic trip unit (LI, LSI)
- **ETM:** Electronic trip unit (LSIG, Multi-function unit)
- **OCR:** Electronic trip unit

MCP CHARACTERISTIC

- Simplified product range
 - **AF:** 150AF, 250AF, 400AF, 600AF, 800AF, 1200AF
 - **Ampere Range:** 1.6A ~ 1200A Only 3 Pole use
- **Standards**
 - Instantaneous circuit breaker with UL489
 - Motor protector with MC and Relay with UL508
- **IEC60947-2**

MCS CHARACTERISTIC

- Simplified product range
 - **AF:** 100AF, 150AF, 250AF, 400AF, 600AF, 800AF, 1200AF
 - **Ampere Range:** 100A ~ 1200A
 - **Pole:** 2P, 3P
- **Standards**
 - World class with UL489
- **IEC60947-2**



UTS600



UTS800



UTS1200

Engineered for Optimal Protection

SUSOL SERIES OFFER VARIOUS TRIP UNITS :

- **ATU** (Adjustable thermal & magnetic unit)
- **FMU** (Adjustable thermal, fixed magnetic unit)
- **FTU** (Fixed thermal & magnetic unit)
- **ETS** (Electronic trip unit for UTS150...UTS600)
- **ETM** (Electronic trip unit for UTS400, UTS600)
- **OCR** (Electronic trip unit for UTS800, UTS1200)

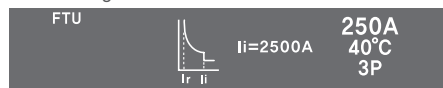


THERMAL MAGNETIC TRIP UNITS

- UTE100...UTS600 frame
- 15-600 amperes
- Factory-installed
- Several versions by rated current and function

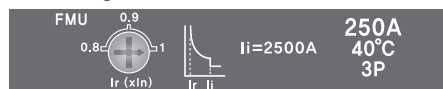
FTU

- Fixed Thermal. 15A~600A
- Fixed Magnetic. 400A~6000A



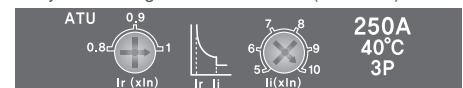
FMU

- Adjustable Thermal. 25A~600A(0.8~1 x In)
- Fixed Magnetic. 400A~6000A



ATU

- Adjustable Thermal. 100A~600A(0.8~1 x In)
- Adjustable Magnetic. 500A~6000A(5~10 x In)



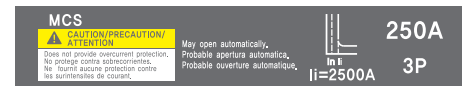
MCP

- Adjustable Magnetic. 10A~6000A



MCS

- Fixed Magnetic. 1000A~6000A



ELECTRONIC TRIP UNITS

- UTS150...UTS600 frame
- 15~600 amperes
- Factory-installed
- Several versions by rated current and function

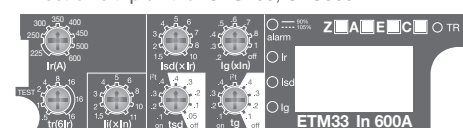
ETS

- Electronic trip unit for UTS150...UTS600



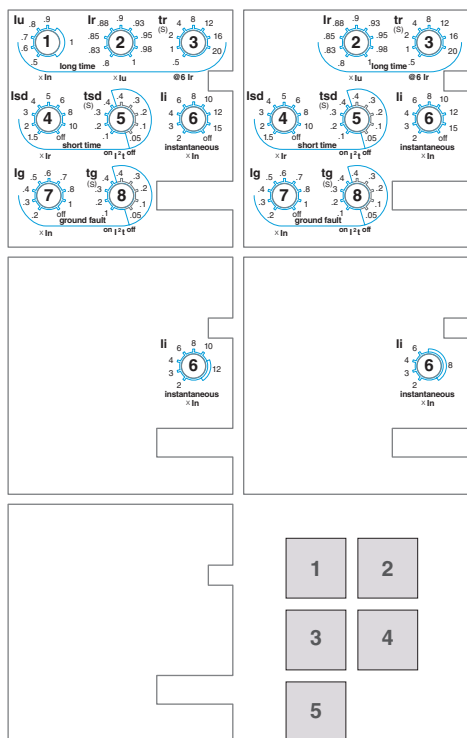
ETM

- Electronic trip unit for UTS400, UTS600



ELECTRONIC TRIP UNITS

- UTS800, UTS1200 Frame
- 400-1200 Amperes
- Factory-installed internal trip units.
- Several versions by rated current and function

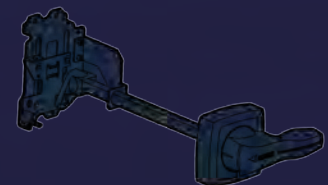
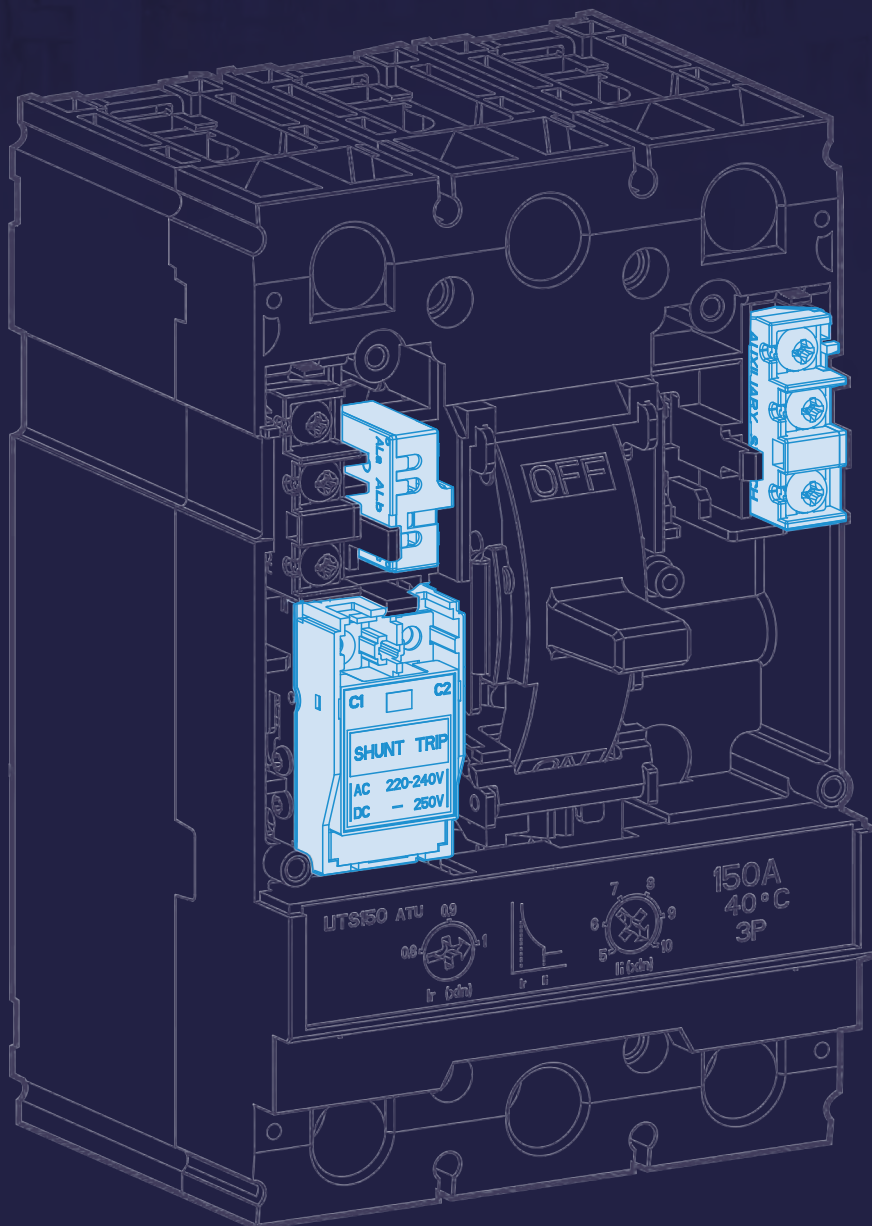


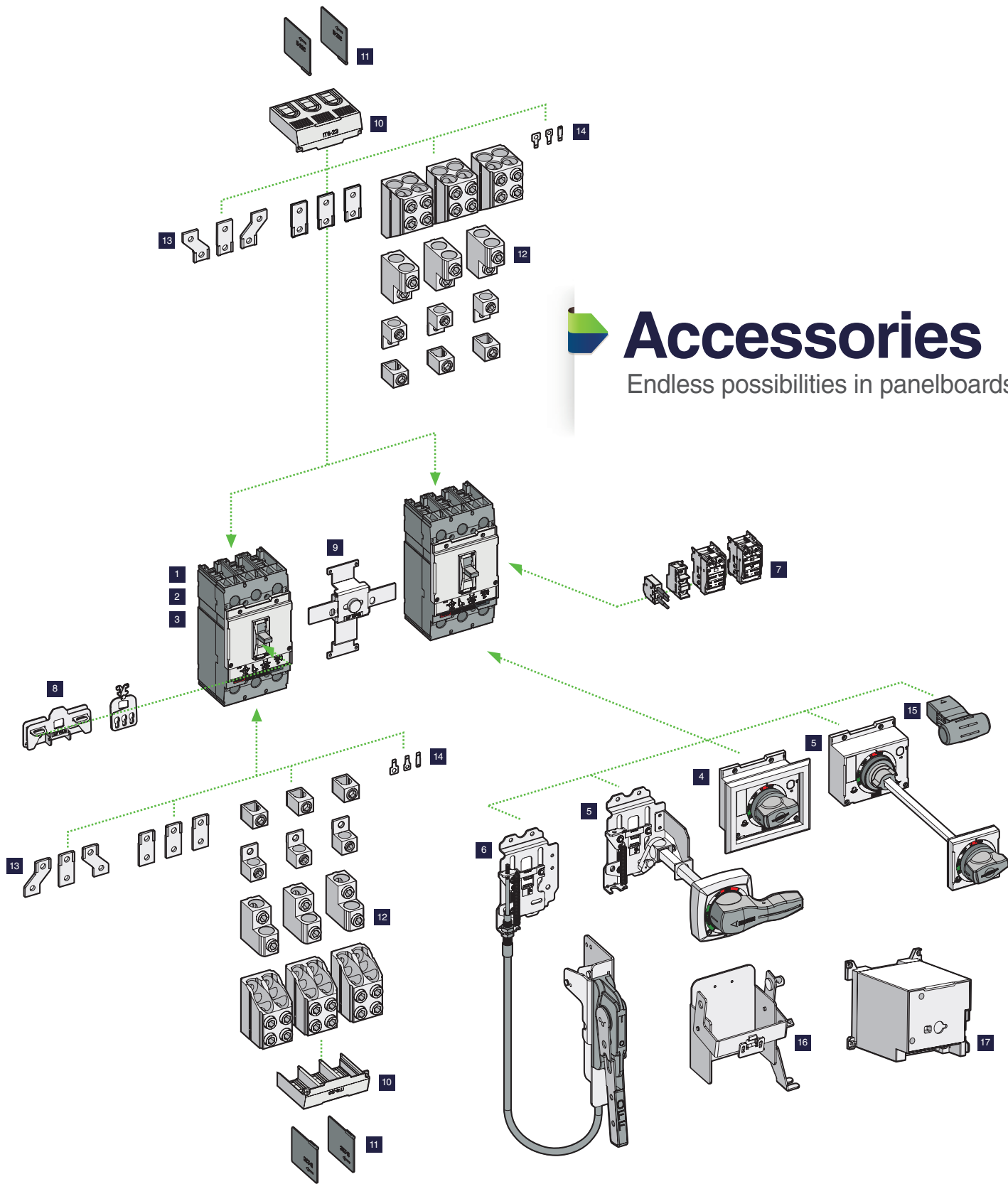
1. N, A type Knob information
2. P, S type Knob information
3. MCP800 type Knob information
4. MCP1200 type Knob information
5. MCS800/1200 type Knob information

FUTURING SMART ENERGY

FOR EXTENSIVE APPLICATIONS

Wide range of optimized auxiliaries and accessories



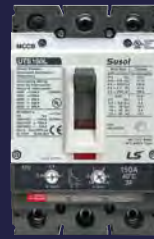


Accessories

Endless possibilities in panelboards

- | | | | | | |
|---|-----------------------------|----|--------------------------------------|----|-------------------------------|
| 1 | Molded Case Circuit Breaker | 7 | Inner Accessories (AL, AX, UVT, SHT) | 13 | Busbar Connectors |
| 2 | Motor Circuit Protector | 8 | Locking Device (Handle) | 14 | Control wire Terminal |
| 3 | Molded Case Switch | 9 | Mechanical Interlock | 15 | Aux. Handle |
| 4 | Direct Rotary Handle | 10 | Terminal Shield | 16 | Operating Mechanism (VDM/COM) |
| 5 | Extended Handle | 11 | Interphase Barriers | 17 | Motor operator (MOP) |
| 6 | Flange Cable Handle | 12 | Mechanical Lugs | | |

Series Overview



		UTE100			UTE100			UTS150			UTS250			
		100A		30A	100A		30A	150A			250A			
		2			3			2, 3			2, 3			
		E	N	H	E	N	H	N	H	L	N	H	L	
Frame		UTE100			UTE100			UTS150			UTS250			
Maximum rated current		50		65	50		65	65			65			
Number of poles		100			100	100			150			150		
Breaker type		25			35	25			35			35		
UL489/CSA C22.2		14			18	14			18			18		
Interrupting capacity (kA rms) AC(50/60HZ) UL, CSA	120/240V 240V ac 480V ac 600V ac 600Y/347V ac	16			25	16			25			35		
UL489 DC		50			65	50			65			65		
Interrupting capacity (kA) DC UL, CSA	250V dc-2P 500V dc-3P 600V dc-3P	25			35	25			35			35		
IEC 60947-2		50			65	50			65			65		
Ultimate breaking capacity, (kA rms) AC 50/60Hz, Icu	220/240V 380/415V 480/500V	100%			100%			100%			100%			
Service breaking capacity, Ics (%Icu)		750 Vac			750 Vac			750 Vac			750 Vac			
Insulation voltage, Ui		8 kVac			8 kVac			8 kVac			8 kVac			
Impulse withstand voltage, Uimp		-			-			-			-			
Rated short-time withstand current (Icw)		A			A			A			A			
Utilization category		15-100A		15-30A	15-100A		15-30A	40-150A			150-250A			
TRIP UNITS	Amperes	-			-			-			-			
F : Fixed	ATU	-			-			-			-			
A : Adjustable	FMU	-			-			-			-			
T : Thermal	FTU	●			●			●			●			
M : Magnetic	ETS	-			-			●(60,100,150A)			●(150, 250A)			
E : Electronics	ETM	-			-			-			-			
	OCR	-			-			-			-			
MCP	Amperes	-			-			1.6-60A 100-150A			220A			
	MCP	-			-			-			-			
MCS	Amperes	100A		-	100A		-	150A			250A			
	MCS	●		-	●		-	●			●			
Unit mounted		●			●			●			●			
Mechanical lugs		●			●			●			●			
Busbar connectors		●			●			●			●			
Control wire terminal kit		-			-			●			●			
Terminal shields		-			-			-			-			
Interphase barriers		●			●			●			●			
Shunt trip		●			●			●			●			
Undervoltage trip		●			●			●			●			
Auxiliary switch		●			●			●			●			
Alarm switch		●			●			●			●			
Fault alarm switch		-			-			●			●			
Flange cable handle		●			●			●			●			
Flange variable-depth mechanism		●			●			●			●			
Directly-mounted rotary operating handle		-			●			●			●			
NEMA-Door-mounted operating mechanisms		●			●			●			●			
IEC-Door-mounted operating mechanisms		●			●			●			●			
Mechanical interlocks		-			●			●			●			
Handle padlock attachment		●			●			●			●			
Motor operator		-			-			●			●			
Weight(approximate) lbs.(kg)	2-Pole 3-Pole	1.64(0.74)		-	2.33(1.06)		-	3.44(1.56) 3.95(1.79)			3.88(1.76) 4.49(2.04)			
Dimensions Inches(mm)	W x H x D	W	H	D	W	H	D	W	H	D	W	H	D	
	2-Pole	2.01(51)	5.12(130)	3.44(87.5)	-	-	-	4.13(105)	6.50(165)	3.44(87.5)	4.13(105)	7.48(190)	3.44(87.5)	
	3-Pole	-	-	-	2.99(76)	5.12(130)	3.44(87.5)	4.13(105)	6.50(165)	3.44(87.5)	4.13(105)	7.48(190)	3.44(87.5)	



UTS400			UTS600			UTS800			UTS1200			
400A			600A			800A			1200A			
2, 3			2, 3			3			3			
N	H	L	N	H	L	N	H	L	N	H	P	L
UTS400			UTS600			UTS800			UTS1200			
-	-	-	-	-	-	-	-	-	-	-	-	-
65	100	150	65	100	150	65	100	150	50	100	65	150
35	65	100	35	65	100	35	65	100	35	65	50	100
18	35	50	18	35	50	18	35	50	18	25	50	35
-	-	-	-	-	-	-	-	-	-	-	-	-
UTS400			UTS600			UTS800			UTS1200			
35	50	65	35	50	65	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
35	50	65	35	50	65	-	-	-	-	-	-	-
UTS400			UTS600			UTS800			UTS1200			
65	100	150	65	100	150	65	100	150	50	100	65	150
35	65	100	35	65	100	35	65	100	35	65	50	100
18	35	50	18	35	50	18	35	50	25	35	50	50
100%			100%			100%			100%			
750 Vac			750 Vac			1000 Vac			1000 Vac			
8 kVac			8 kVac			8 kVac			8 kVac			
-			-			-			-			
A			A			A			25kA			
250/300/350/400A			500/600A			400/600/630/800A			800/1000/1200A			
●			●			-			-			
●			●			-			-			
● (250, 400A)			● (400, 600A)			-			-			
● (250, 400A)			● (400, 600A)			-			-			
-			-			-			-			
320A			500A			800A			1200A			
●			●			●			●			
400A			600A			800A			1200A			
●			●			●			●			
●			●			●			●			
●			●			●			●			
●			●			●			●			
●			●			●			●			
●			●			●			●			
●			●			●			●			
●			●			●			●			
●			●			●			●			
●			●			●			●			
●			●			●			●			
●			●			●			●			
●			●			●			●			
12.02(5.45)			13.45(6.10)			-			-			
13.89(6.30)			15.79(7.16)			31.35(14.22)			40.28(18.27)			
W	H	D	W	H	D	W	H	D	W	H	D	
5.51(140)	11.42(290)	4.33(110)	5.51(140)	13.39(340)	4.33(110)	-	-	-	-	-	-	
5.51(140)	11.42(290)	4.33(110)	5.51(140)	13.39(340)	4.33(110)	8.27(210)	12.88(3272)	6(152.5)	8.27(210)	16.26(413)	6(152.5)	